Nayax | CoinBridge

Virtual EMV Terminal

Operational Guide

Version 1.0.5

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Kindly be aware that this document is designed to work seamlessly with EMV apk version 1.0.5 and any subsequent official releases.

Introduction

CoinBridge Virtual EMV Terminal is an **Android application**, which simulates a real physical EMV payment terminal. In its essence, it is the same software application embedded into physical payment terminals.

The application was created to simplify real-life payment testing and QA processes, eliminating the need for use of a physical device.

The EMV application enables comprehensive testing of CoinBridge payment flows in Staging or QA environments before any product release. It serves as a crucial tool for testing the staging environment of Android and iOS mobile applications that have the CoinBridge staging SDK integrated.

The application mimics the exact payment flow, just as it occurs in production environments using physical EMV terminals.

Behind the scenes, the payment authorization request/response are sent directly to/from CoinBridge servers, over the Credit Card Scheme, exactly as it would in production environment.

This Virtual EMV application communicates with the CoinBridge Staging SDK (which is embedded within your mobile application).

Requirements

1. **General:**

   Make sure to use a CoinBridge Staging SDK version that is compatible with Virtual EMV applications. In case of doubt, please contact CoinBridge.

   Make sure to use the latest version of the EMV Terminal application.

2. **Supported mobile devices:**

   The EMV application should be installed only on Android mobile devices, which have NFC capabilities.

   Devices must support Android OS versions 8 and above.

   Tested device manufacturers, supporting the EMV Terminal application are Samsung, Xiaomi and Google ("Pixel").

3. **Device related conditions:**

   The mobile device, on which the EMV Terminal application is to be installed, should be free of any other applications that use NFC or Payments NFC capabilities.

   The mobile device's NFC capabilities must be enabled.

Definitions

1. **Amount**

   The transaction amount to be transmitted over the Credit Card Scheme.

2. **Currency**

   The transaction currency, to be transmitted over the Credit Card Scheme.

3. **MCC**

   Merchant Category Code.

   A 4-digit number that describes the merchant's primary business activity. This is defined by the merchant when he joins a processor.

4. **MID**

   Merchant Identification Number.

   A 15-digit number that is correlated with a specific merchant's processing terminal.

   One merchant may have several MIDs when each terminal has a different MID (not always the case).

   MID will be provided to you by the merchant's acquirer/payment processor.

   Please be aware that in certain countries, such as Israel, a different format of MID is utilized, and it may consist of fewer than 15 digits. It's important to consult with CoinBridge to confirm the applicable MID format when conducting testing in a specific country.

5. **Country**

   The country where the payment originates (the merchant's country, for example). Represents transaction's origin country.

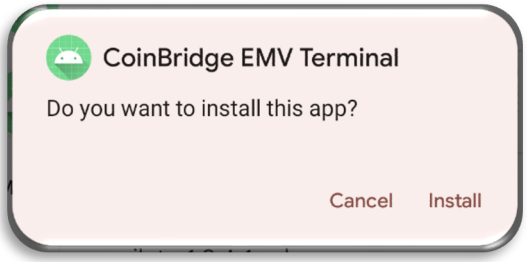
6. **Merchant Name**

   Name of merchant, as is transmitted over the card network.

   The Merchant Name is correlated with the Merchant's MID.

APK Installation Instructions

1. Please request the latest version of the "Virtual EMV Terminal application APK" from the CoinBridge onboarding team.
2. Download the APK to the designated mobile device (via G-Drive, Slack, Direct USB, etc.)
3. Install the APK (by tapping the file).

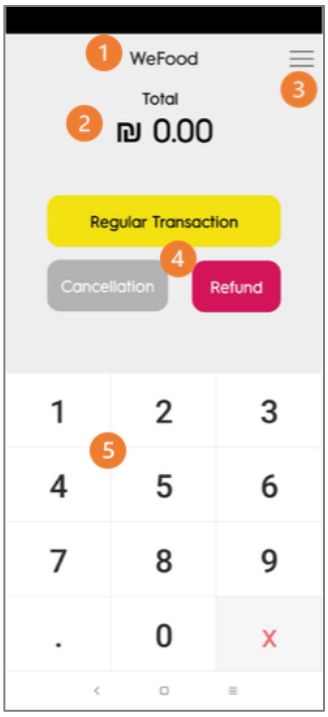


Note: Before trying to use the application, please refer to the "Requirements" section above.

EMV Terminal: App Manual

Main App Screen

The application's main screen contains the following:



Home Screen

1. **Merchant Name**

   Located in the header (default name: "WeFood").

2. **Transaction Amount and Currency Symbol**

   Displays the specified transaction amount, with up to two decimal places, and the chosen transaction currency.

3. **Setting Menu**

   Tap on this element to access the "Settings" Menu.

4. **Initiate Transaction by Transaction Type**

   Enables the EMV application to accept communications from an NFC device.
   Each button activates NFC and performs the selected Transaction Type (Regular/Refund/Cancellation) based on the button you choose. For more technical information regarding Transaction Types – please refer to **CoinBridge Back-Office Connector Integration** document.

5. **Amount Selection Numpad**

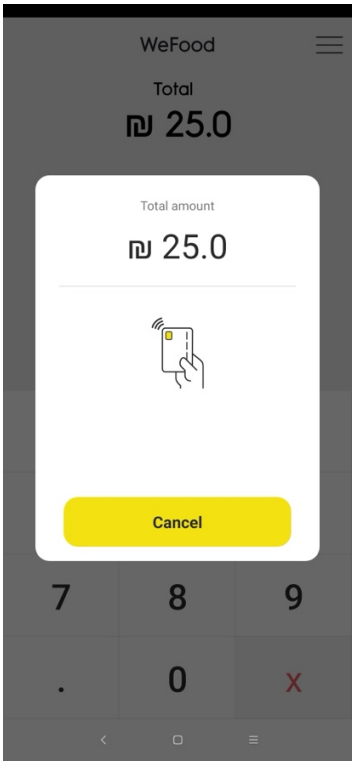
   Used to determine the desired transaction amount.

   Tapping on the **X** button deletes the entered amount.

Performing a Regular Payment

To perform a regular payment, please go through the following steps:

1. Type-in the desired transaction amount (using the amount numpad).
2. Click on the yellow-colored box named **"Regular Transaction"**.
3. After clicking on the box, the EMV application will present the "Pending NFC communication" screen.



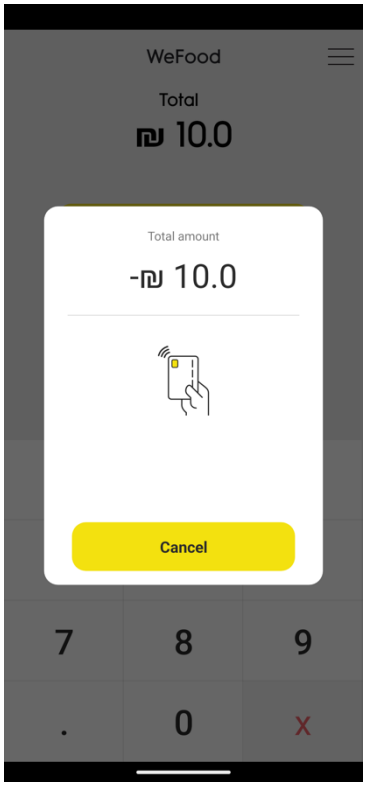
"Pending NFC Communication" Screen

4. Once this screen is displayed, you can tap the mobile device to pay with a "Tap & Go" experience.
5. Clicking on the "Cancel" button stops NFC readiness and reverts the application to the main screen.

Performing a Refund

To perform a refund, please go through the following steps:

1. Type-in the desired transaction amount (using the amount numpad).
2. Click on the red-colored box named "**Refund**".
3. After clicking on the box, the EMV application will present the "Pending NFC communication" screen.



"Pending NFC Communication" Screen

4. Once this screen is displayed, you can tap the mobile device to refund with a "Tap & Go" experience.
5. Clicking on the "Cancel" button stops NFC readiness and reverts the application to the main screen.

Performing a Transaction Update (Cancellation)

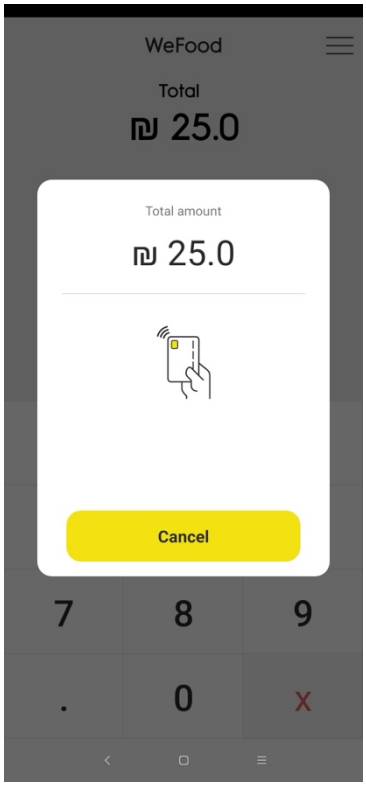
A "**Transaction Update**" denotes a notification originating from the CoinBridge backend to your application. It pertains to a transaction that had been initially marked as "approved" but ultimately failed, often due to issues like network errors. In such instances, the user might have perceived the transaction as unsuccessful, while our system recorded it as a success.

It's important to understand that in practice, this particular transaction isn't relayed through the EMV process. Instead, it is communicated from the CoinBridge backend as an event, complete with the original Transaction ID, to initiate the cancellation process.

For more technical information regarding Transaction Update – please refer to **CoinBridge Back-Office Connector Integration** document.

To perform a cancellation, please go through the following steps:

1. Type-in the desired transaction amount (using the amount numpad).
2. Click on the grey-colored box named "**Cancellation**".
3. After clicking on the box, the EMV application will present the "Pending NFC communication" screen.



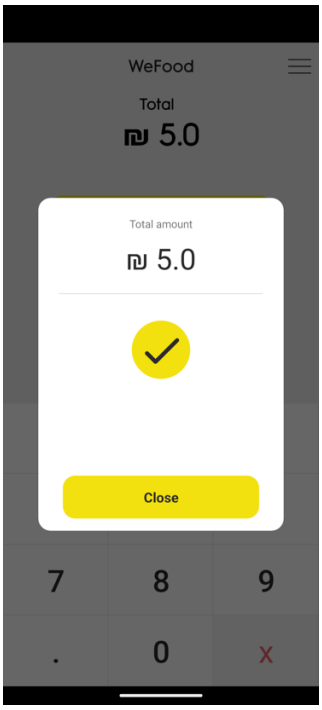
"Pending NFC Communication" Screen

4. Once this screen is displayed, you can tap the mobile device to perform a cancellation transaction with a "Tap & Go" experience.
5. Clicking on the "Cancel" button stops NFC readiness and reverts the application to the main screen.

Transaction Outcomes

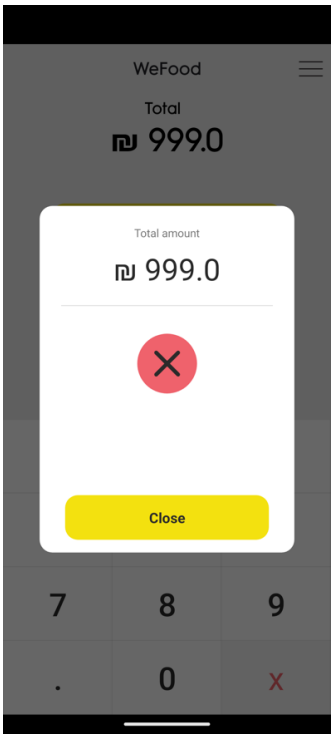
1. **Transaction Approved**

   If the transaction is approved by CoinBridge, the following screen is displayed:



2. **Transaction Declined**

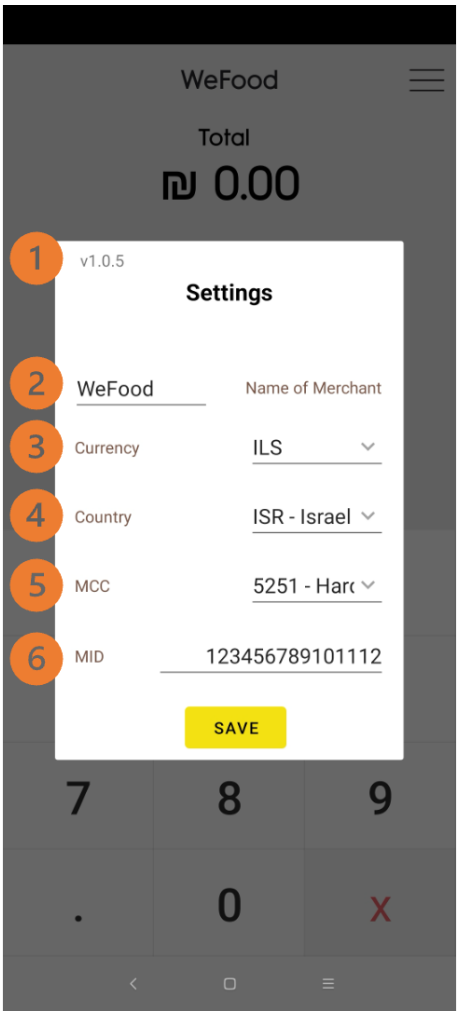
   If the transaction is declined by CoinBridge, the following screen is displayed:



Settings Screen

The settings screen will allow you to modify the transaction attempt parameters so you can:

1. Check your application version.
2. Simulate different scenarios relating to:
    a. Merchant Name
    b. Currency
    c. Country
    d. MCC (Merchant Category Code)
    e. MID (Merchant Identifier)



Settings Screen

The settings screen contains the following parameters:

1. **Application Version**

   Displays the current application version.

2. **Name of Merchant**

   The name of the merchant that is used to perform the transaction attempt.
   Accepts free text (including non-English characters).

3. **Currency**

   Allows selection of transaction currency out of a predefined list.

4. **Country**

   Allows selection of transaction country out of a predefined list.

5. **MCC**

   Allows selection of Merchant Category Code out of a predefined list.

6. **MID**

   Changes the MID number of the merchant.
   Accepts up to 15-digits number.

   Please be aware that in certain countries, such as Israel, a different format of MID is utilized, and it may consist of fewer than 15 digits. It's important to consult with CoinBridge to confirm the applicable MID format when conducting testing in a specific country.

Note: By saving your selected settings, the application will remember those for all future attempts, until changes and saved again.